CAN RADIO DRAMA IMPROVE CHILD HEALTH AND NUTRITION IN SOMALIA?
**Media and audience research: a key part of BBC Media Action’s work**

BBC Media Action, the BBC’s international development charity, uses the power of media and communication to support people to shape their own lives. Working with broadcasters, governments, other organisations and donors, we provide information and stimulate positive change in the areas of health, governance, resilience and humanitarian response. Our projects run in more than 25 countries across Africa, Asia, the Middle East and Europe.

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Can radio drama improve child health and nutrition in Somalia?

People who listened to a radio drama and magazine programme about child health and nutrition in Somaliland knew more than non-listeners about how to prevent and treat children's illnesses, and practised what they learned.

After decades of civil conflict and recurring natural disasters, almost 15 out of every 100 children in Somalia die before their fifth birthday, leaving the country with the world's fourth-highest under-five mortality rate.¹ To help address the poor behaviours around nutrition, hygiene and health that contribute to this, BBC Media Action, with support from Unicef, implemented a media and communication project in Somalia from 2011 to 2013.

Its main output was *Tiraarka Qoyska* (Pillars of the Family), a weekly radio health programme that ran for 75 episodes on BBC Somali. The programme included an interactive health magazine segment and a drama called *Dareemo* (meaning “hay” to emphasise the programme’s rural setting), both of which covered the same health topic each week. This research briefing presents key findings on the impact of listening to the programme.

*Tiraarka Qoyska* aimed to increase the uptake of six supporting priority behaviours that, if more widely adopted, could improve child health:

1. More women start breastfeeding within one hour of birth
2. More babies are exclusively breastfed for six months
3. More caregivers practise appropriate complementary feeding for their children after six months
4. More caregivers increase children’s intake of food and fluids including breastfeeding, use of ORS (oral rehydration solution) and zinc supplements when they have diarrhoea*¹
5. More caregivers wash their hands with soap or ash before eating, before feeding children and after toilet activities
6. More caregivers safely dispose of faecal matter

*The World Health Organization ranks diarrhoea as the second-largest cause of death in children under five years old worldwide.

Radio programme *Tiraarka Qoyska* was aimed at mothers and families of children under one year old. © Sven Torfinn, Panos Pictures
Tiraarka Qoyska: an example of “health edutainment”

Radio drama storylines

*Tiraarka Qoyska*’s drama plots modelled recommended behaviours around health relevant to the audience’s daily experiences in an entertaining and emotionally engaging way. Set in a fictional camp for internally displaced people, the drama’s characters reflected all three regions of the country – Somaliland, Puntland and South Central Somalia. Some characters followed traditional health practices while others used modern treatments. Two stories featured the deaths of characters’ babies, which were later shown to be among the programme elements that audiences remembered the most.

The first story featured Ibrahim and Raho, a couple who have two children. Raho, a traditional birth attendant who believes in traditional treatments, refuses to follow advice to give ORS and zinc supplements to their baby with diarrhoea. As a result of lack of first aid treatment and not being taken to hospital, the baby dies. This painful journey enables them to change their behaviour with their second child in later episodes.

In the second story, couple Istaahil and Geedi lose their baby girl as a result of their decision to try to cure her diarrhoea with a traditional treatment (burning her head with fire), and delaying their arrival at hospital. Their story also addressed the importance of breastfeeding and hygiene to prevent diarrhoea in babies.

Interactive magazine programme

In the same broadcast, the stories and issues raised in *Dareemo* were followed by detailed discussions with health experts, community health workers, and traditional and religious leaders to reinforce the health messages. Audience members could ask questions and comment through phone calls and text messages, ensuring that the listeners were an integral part of the programme.
Research approach

BBC Media Action conducted research throughout the project to inform programme making and to understand the impact of listening to Tiraarka Qoyska on key factors related to priority behaviours around child health and nutrition. The research presented in this briefing was conducted in Somaliland because of security risks in Puntland and South Central Somalia; however, the programme was aired in all three Somali regions.

The mixed-methods impact evaluation consisted of two streams of research:

- A qualitative longitudinal panel including in-depth interviews and focus group discussions with 60 young mothers, 30 husbands and 30 grandmothers was conducted at five points in time over the course of the project.
- Quantitative survey interviews were held with 2,182 mothers with a child under one year old across Somaliland to compare knowledge, attitudes and practices related to child care among programme listeners and non-listeners. In addition, a representative survey of the adult population in Somaliland (881 men and women aged 15+) was conducted at the end of the project to establish programme listenership among the target audiences. Both surveys were conducted during November 2013.

The findings emerging from both streams of research were compared and cross-verified to provide a comprehensive evaluation of the impact of listening to the programmes.

Yes, in the past, I believed in feeding the baby via the baby bottle but now I have been changed by Tiraarka Qoyska. Breastfeeding is the best.

Young pregnant mother, listener

How can media and communication improve health?

- Media can reach large audiences and the platform and format can be tailored to attract specific target groups.
- Media can help to improve health by increasing knowledge, and by shifting attitudes and social norms. This can, in turn, increase confidence and support action.
- Media can engage audiences by creating entertaining, interactive programmes that trigger emotions. This can encourage audiences to absorb new information and to rethink common misconceptions, which can inform practices.
- Media interventions’ influence can reach beyond the immediate audience by encouraging knowledge sharing across social networks, or through indirect influence on social norms.
Key findings

Listening to *Tiraarka Qoyska* improved knowledge and practices

A large majority of listeners reported that they had learned new things from *Tiraarka Qoyska* that they otherwise would not have known and, as a result, changed some of their daily habits. These audience members demonstrated improved knowledge of health issues and better practices.

For example, I listened to the discussion about colostrum so when my wife gave birth to a baby I told her about the importance of colostrum.

Father, listener

This was particularly true in the prevention and treatment of illness in children. Indeed, the elements of the programme that made the strongest impression on listeners were drama storylines in which babies died from preventable illnesses. These stories are directly linked with the types of behaviours in which listeners have demonstrated better results than non-listeners. There has been little research of this kind in Somalia, so findings contribute to understanding the potential effectiveness of media interventions to improve child health there and in other countries.

The programme reached its target audiences

The project successfully reached its target population: audiences were relatively young men and women, mostly uneducated, with the majority in the poorer socio-economic groups. More than one in five adults in Somaliland listened to *Tiraarka Qoyska* at least once, equivalent to almost half a million people. The majority of those exposed (67%, or about 300,000 people – 14% of the adult population) were regular listeners to the magazine and/or drama elements, meaning that they had listened to at least every other episode. In addition, many listeners reported discussing issues raised in the programmes with their social networks, indicating that *Tiraarka Qoyska* may have reached beyond its immediate audience.

Most of the regular listeners came from rural and less populated regions of Somaliland (such as Sanaag and Sool). This indicates radio’s effectiveness in
reaching people in Somalia typically considered hard to reach and the poorest of the poor. Feedback from interviewees indicated that people from central urban areas can choose from a variety of cultural and media outlets including TV. However, radio is by far the most accessible medium in rural and remote areas, with BBC Somali being particularly popular as one of only two radio stations with almost full national coverage.3

The combination of drama and discussion formats was successful. While both women and men were interested in the subject of child health and nutrition, different audiences found different formats within programmes more appealing. Mothers and grandmothers (who were the main target audiences) preferred the drama. Men (who have an influence on child care practices) were more interested in the discussion programme, particularly in interviews with the doctors and medical authorities it featured. Therefore, including two formats in one programme catered to a wide audience.

There was sufficient time to establish a broad audience base and to contribute to behaviour change. Only in the third wave of the longitudinal research, which was conducted after about 35 episodes of the programme were broadcast, could any impact be identified. This included a significant surge in number of listeners, recall of the contents and storylines, and demonstrated learning among the research participants.
Impact: people said that they changed their behaviour

A large majority of the listeners (84%) reported that they learned new things about health from the programmes and that they changed some of their daily habits as a result. These self-reported changes in behaviour were supported by findings from the two streams of research, which showed that Tiraarka Qoyska listeners demonstrated improved knowledge and health practices compared with non-listeners. The results, however, were not consistent across all of the priority behaviours targeted.

What did listeners do differently?

Listeners most recalled tragic drama storylines, such as babies dying from illnesses, illustrating the potentially fatal results of not adhering to recommended health practices. These stories also made the strongest impression on people and are directly linked with the types of behaviours in which listeners have demonstrated better results than non-listeners, specifically appropriate child care during sickness:

- While many mothers in Somaliland incorrectly believed that when babies have diarrhoea their food and fluids should be reduced, listeners to Tiraarka Qoyska were much more likely than non-listeners to continue or increase breastfeeding and to give a child with diarrhoea fluids and foods, as recommended.
- Listeners were more likely to report treating their sick child with ORS and less likely to give their child traditional remedies than non-listeners. They were also more likely than non-listeners to support the idea of taking a seriously ill child to hospital.
- Listeners were more knowledgeable about the links between poor hygiene, sanitation and lack of breastfeeding, and infections and child sickness, and were more informed than non-listeners of the importance of hygiene when feeding a baby.

Changes in understanding of how to prevent and treat child illness over time

<table>
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<th>WAVE 1</th>
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<td>(Before the programme went on air, June 2012)</td>
<td>(November 2012)</td>
<td>(April 2013)</td>
<td>(July 2013)</td>
<td>(End of project, November 2013)</td>
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At the beginning of the study, young mothers across all groups knew that in cases of severe diarrhoea, ORS should be given to their child and breastfeeding should be continued.

However, many mothers reported reducing their child’s intake of food and/or water during diarrhoeal illness, which goes against recommendations.

During Waves 2 and 3, research findings on this priority behaviour were more or less similar to Wave 1.

Non-listener mothers displayed knowledge of the causes of diarrhoea in children, saying that it may be caused by poor sanitation, scarcity of water, dirty feeding bottles and not washing hands. Mothers could not give more specific details about the causes and effects of diarrhoea.

Listener mothers displayed deeper levels of understanding than their non-listener counterparts. This included:

- Not washing your hands after using the latrine and then preparing food and feeding the baby would lead to germs getting on the food, which would cause infections and diarrhoea
- The importance of covering food to protect it from flies that may have landed on faeces or stagnant water
- Lack of breastfeeding can lead to “poor defence” (low levels of immunity to illness)
They [the characters] were talking about these things ... about who is better – the baby who was given the breast at first or the one who is not, and that the one who was given the breast is healthier and gets more protein than the other. I have taken this opinion and will use it if God wills.

Young mother, listener

BASE: All mothers who reported that their youngest child had had diarrhoea in last six months (All = 636; Listeners = 97; Regular listeners = 63; Non-listeners = 539).

*The differences between the numbers of listeners and non-listeners who took action are statistically significant, p<0.05.
What worked and what did not?

Emotional engagement and information may support learning and behaviour change

Listeners demonstrated improved knowledge and behaviours not only relating to issues addressed by the tragic drama storylines but also about issues that were addressed in the magazine episodes linked to these storylines. For example, increasing food and fluid intake for sick children, a recommendation hardly addressed in the drama plot, was the focus of 12 episodes of the discussion programme complementing the dramatic storyline. Programme listeners were significantly more likely to implement this advice than non-listeners, although these magazine shows were hardly recalled by the listeners.

In fact, the research found no link between issues most recalled from the magazine programme and improved health indicators among listeners. This may suggest that emotional engagement with the drama motivated listeners to rethink common misconceptions that inform practices. It may also make them more receptive to the relevant information discussed in the magazine programme even if they did not remember it later.

While this evaluation was not designed to provide evidence of a causal link between specific features of the programmes and behaviour change, it highlights the potential roles of emotional engagement and information as mediating factors contributing to behaviour change. It is important to note that the impact survey was conducted only with mothers, an audience group that has expressed a clear preference for drama over the discussion format. Other features of the programming may have had more influence on men (who have expressed more interest in the magazine programme), or other audience groups.

Practical barriers had a negative impact on behaviour change

Research found that when the barriers to uptake of recommended behaviour were practical or environmental, the project was less successful in achieving its objectives. For example, listeners to Tiraarka Qoyska knew more about appropriate food for infants compared with non-listeners. However, the common diet for all six- to eight-month-old infants (whether their mothers were listeners or non-listeners) was based on soft foods such as bread, rice and biscuits that were not recommended. These results indicated that limited availability of and high costs of nutritious foods may be key barriers to the implementation of appropriate feeding in Somaliland.

Similarly, practices for disposal of faecal matter did not vary by listenership to Tiraarka Qoyska, despite this being a key issue in both the drama and discussion programmes. Lack of latrines and toilet facilities may be a significant barrier to change.
Conclusions

1. Radio, particularly BBC Somali, is an effective medium for reaching people in remote areas of Somalia who are typically hard to reach, including the poorest. However, the types of formats used for health interventions need to be carefully selected depending on target audiences’ preferences to ensure optimal engagement with the programmes.

2. Drama has been shown to have a particularly powerful role in encouraging audiences to absorb new and relevant information. Tragic stories illustrating the potentially fatal results of not adhering to recommended health practices were most recalled by listeners and most associated with improved health practices. The tragic storylines led to an emotional response among the audience, and this has been linked with shifts in knowledge, attitudes and behaviour in the survey.

3. Sufficient time has to be allowed in media interventions to establish a wide audience base and contribute to change in deeply rooted practices and beliefs. In Somalia, preliminary signs that people were broadly aware of and learning from the programme appeared only after more than 30 episodes were aired.

4. Strengthen stakeholder partnerships. Programme listeners were more knowledgeable than non-listeners about many of the issues addressed, but changed their behaviour only when the means to do so were accessible. Partnerships with other stakeholders who can supply or support people to get the goods and services they need (such as nutritious foods, vaccines and latrines) could increase target audiences’ motivation and ability to change their behaviour. This could, in turn, improve health outcomes. In addition, programmes should recommend only practices that are feasible and accessible to the target populations, and avoid setting unrealistic goals.

I spoke to some people who didn’t listen to the programme. They asked me what [information] I got. I told them how to breastfeed babies, sanitation, how to deal with garbage to protect you against flies, how to give food to the baby in a clean utensil and that when a pregnant girl delivers, the baby should not be given water before the breast.

Young listener mother with an infant under six months
Endnotes


2 In the absence of an updated population census, the estimate of Somaliland’s population was based on projections published by the Somaliland government, which estimated the population in 2009 to be 3.85 million, with an average annual growth of 3.14%. Based on this data, the overall population of Somaliland in 2013 was calculated as 4,356,816 people. According to the Unicef MICS4 survey results, 51% of people in Somaliland are 15 or older. Thus, the adult population in Somaliland in 2013 was calculated as 2,217,619 people.

3 According to a BBC News survey in 2012, BBC Somali reaches 65–70% of Somaliland and Puntland’s adult population every week, giving it the BBC’s highest weekly reach in any country.